

CLAIMS

1. A disk cartridge comprising:

a disk;

a cartridge body having the disk encased rotatably therein and having formed therein a write and/or read opening through which a part of the disk, ranging from the inner to outer radius, is exposed to outside;

a shutter member including a shutter that covers and uncovers the write and/or read opening and a movement guide piece opposite to one side of the cartridge body, and installed to the cartridge body to be movable between a position to cover the write and/or read opening and a position to uncover the write and/or read opening;

a pressing portion installed to the shutter member to face a window formed in the movement guide piece opposite to the one side of the cartridge body;

an elastic moving piece installed to the shutter member to force the pressing portion to outside of the cartridge body; and

a shutter movement limiter provided on the shutter member and that is engaged on a movement limiter provided on the cartridge body, when the shutter member is in a position to cover the write and/or read opening, to limit the shutter member from moving in a direction of uncovering the write and/or read opening, and moves in a direction in which it is disengaged from the movement limiter when the pressing portion is pressed inwardly of the cartridge body.

2. The disk cartridge according to claim 1, further comprising a coupling arm extending from one side of the shutter member,
 - the elastic moving piece being installed to extend along the coupling arm with the base end thereof being fixed to the free end of the coupling arm; and
 - the pressing portion being installed to the free end of the elastic moving piece.
3. The disk cartridge according to claim 1, wherein the shutter movement limiter is provided integrally on the elastic moving piece.
4. The disk cartridge according to claim 1, wherein the forcing member extends from the shutter member in the direction of uncovering the write and/or read opening in the shutter member.
5. The disk cartridge according to claim 1, wherein:
 - the shutter movement limiter is provided on a shutter movement limiting member provided rotatably on the shutter member; and
 - when the shutter member is in the position to cover the write and/or read opening, the shutter movement limiter provided on the shutter movement limiting member is engaged on the movement limiter provided on the cartridge member and limits the movement of the shutter member in the direction of uncovering the write and/or read opening, the pressing portion provided on the shutter movement limiting member is pressed inwardly of the cartridge body, and the shutter movement limiting member is pivoted outwardly of the cartridge body to disengage the shutter member from the movement limiter.

6. The disk cartridge according to claim 1, wherein the movement limiter is one end of a circular peripheral wall defining a receptacle for the disk.
7. The disk cartridge according to claim 1, wherein the shutter movement limiter moves in relation to the cartridge body in a direction in which the shutter member covers the write and/or read opening, and when it has passed by the movement limiter, it is elastically returned to its initial position and engaged on the movement limiter provided on the cartridge body to limit the shutter member from moving in the direction of uncovering the write and/or read opening.
8. A disk recording and/or playback apparatus comprising:
 - a cartridge holder into which there is removably inserted a disk cartridge including:
 - a disk;
 - a cartridge body having the disk rotatably encased therein and having formed therein a write and/or read opening through which a part of the disk, ranging from the inner to outer radius, is exposed to outside;
 - a shutter member including a shutter that covers and uncovers the write and/or read opening, and installed to the cartridge body to be movable between a position to cover the write and/or read opening and a position to uncover the write and/or read opening;
 - a pressing portion installed to the shutter member to face a window formed in a movement guide piece provided opposite to the one side of the cartridge body;

an elastic moving piece installed to the shutter member to force the pressing portion to outside of the cartridge body; and

a shutter movement limiter provided on the shutter member and that is engaged on a movement limiter provided on the cartridge body, when the shutter member is in a position to cover the write and/or read opening, to limit the shutter member from moving in a direction of uncovering the write and/or read opening, and moves in a direction in which it is disengaged from the movement limiter when the pressing portion is pressed inwardly of the cartridge body,

the cartridge holder including a shutter releasing mechanism that disengages the shutter movement limiter from the movement limiter by moving the elastic moving piece against the force of the latter inwardly of the cartridge body when the disk cartridge is inserted into the cartridge holder and moves the shutter member in a direction of uncovering the write and/or read opening.

9. A disk cartridge comprising:

a disk;

a cartridge body having the disk rotatably encased therein and having formed therein a write and/or read opening through which a part of the disk, ranging from the inner to outer radius, is exposed to outside;

a shutter member including a shutter that covers and uncovers the write and/or read opening, and installed to the cartridge body to be movable between a position to cover the write and/or read opening and a position to uncover the write and/or read

opening;

a coupling arm extending from one side of the shutter member;

an elastic moving piece installed to the free end of the shutter member to extend along the coupling arm with the base end thereof being fixed to the free end of the coupling arm, including a pressing portion provided at the base end of the shutter to face a window formed in a movement guide piece provided opposite to the one side of the cartridge body, and forced to project the pressing portion to outside of the cartridge body; and

a shutter movement limiter provided at the middle of the elastic moving piece and that is engaged on a movement limiter provided on the cartridge body, when the shutter member is in a position to cover the write and/or read opening, to limit the shutter member from moving in a direction of uncovering the write and/or read opening, and pivots along with the elastic moving piece in a direction in which it is disengaged from the movement limiter when the elastic moving piece is pressed against its own force by the pressing portion, the disk cartridge being removably placed on a cartridge mount,

the disk cartridge including a pressure avoiding member provided in the cartridge body to position the pressing portion that presses the elastic moving piece of a shutter releasing mechanism, when the disk cartridge is mounted on the cartridge mount, to disengage the shutter movement limiter from the movement limiter by pivoting the elastic moving piece against the force of the latter and avoid pressing of

the cartridge body by the shutter releasing mechanism.